

AMENDMENTS TO THE CLAIMS

1-3. (Cancelled)

4. (Currently Amended) An IL-15 mutein, characterized in that it has a sequence that is directly derived from human mature wild-type IL-15 by one amino acid substitution within the region spanning from residue 44 to residue 52, or from residue 64 to residue 68, or from residue 64 to residue 69, this residue numbering corresponding to the human mature wild-type IL-15, provided that the IL-15 mutein resulting therefrom has an affinity for binding to IL-15Ralpha that is either not different from, or higher than the affinity of human mature wild-type IL-15 for binding to IL-15Ralpha.

5. (Previously Presented) The IL-15 mutein according to claim 4, characterized in that it has a sequence that is directly derived from human mature wild-type IL-15 by one substitution within the region spanning from residue 44 to residue 52, this residue numbering corresponding to the human mature wild-type IL-15, provided that the IL-15 mutein resulting therefrom has an affinity for binding to IL-15Ralpha that is either not different from, or higher than the affinity of human mature wild-type IL-15 for binding to IL-15Ralpha, wherein said IL-15 mutein is an IL-15 agonist.

6. (Currently amended) The IL-15 mutein according to claim 4-~~or~~ 5, characterized in that said one substitution is a substitution of L45, L52, V-I, S51, N, or Q48 by D, E, or K, or R.

7.-8. (Cancelled)

9. (Currently Amended) The IL-15 mutein according to claim 4-~~or~~-5, characterized in that said one substitution is a substitution of one of residues L45, S51, and L52.

10. (Currently Amended) The IL-15 mutein according to claim 4-~~or~~ 5, characterized in that said one substitution is a substitution of residue L45 by D or E.

11. (Cancelled)

12. (Currently Amended) The IL-15 mutein according to claim 4-~~or~~ 5, characterized in that said one substitution is a substitution of residue S51 by D.

13. (Cancelled)

14. (Currently Amended) The IL-15 mutein according to claim 4-~~or~~ 5, characterized in that said one substitution is a substitution of residue L52 by D.

15.-36. (Cancelled)

37. (Currently Amended) A pharmaceutical composition which comprises an IL-15 mutein according to claim 5 and, and/or an IL-15 mutein fragment according to claim 28, and which optionally comprises at least one of a pharmaceutically acceptable vehicle, and/or a pharmaceutically acceptable carrier, and/or a pharmaceutically acceptable diluent, and[[/or] a pharmaceutically acceptable adjuvant.

38.-43. (Cancelled)

44. (Currently Amended) The IL-15 mutein according to claim 4, characterized in that said one substitution is a substitution of one of residues L45, Q48, S51, L52, E64, N65, I68 or L69.

45. (Currently Amended) The IL-15 mutein according to claim 5, characterized in that said one substitution is a substitution of one of residues L45, Q48, S51 or L52.

46. (New) The IL-15 mutein according to claim 4, characterized in that it has a sequence that is directly derived from human mature wild-type IL-15 by one substitution within the region spanning from residue 64 to residue 68, this residue numbering corresponding to the human mature wild-type IL-15, provided that the IL-15 mutein resulting therefrom has an affinity for

binding to IL-15Ralpha that is either not different from, or higher than the affinity of human mature wild-type IL-15 for binding to IL-15Ralpha, wherein said IL-15 mutein is an IL-15 antagonist or an IL-15 partial antagonist.

47. (New) The IL-15 mutein according to claim 46, characterized in that said one substitution is a substitution of E64 by K.

48. (New) The IL-15 mutein according to claim 46, characterized in that said at substitution is a substitution of residue N65 by K.

49. (New) The IL-15 mutein according to claim 46, characterized in that said one substitution is a substitution of residue I68 by D.

50. (New) The IL-15 mutein according to claim 46, characterized in that said one substitution is a substitution of residue L69 by R.